

MES COLLEGE OF ENGINEERING, KUTTIPPURAM DEPARTMENT OF COMPUTER
APPLICATIONS 20MCA245 – MINI PROJECT

PRO FORMA FOR THE APPROVAL OF THE THIRD SEMESTER MINI PROJECT

(Note: All entries of the pro forma for approval should be filled up with appropriate and complete information. Incomplete Pro forma of approval in any respect will be rejected.)

Mini Project Proposal No : _____
(Filled by the Department)

Academic Year : 2021-2022

Year of Admission : 2020

1. Title of the Project : **Rumor Detection from Social Media**

2. Name of the Guide : _____

3. Number of the Student: _____ MES20MCA-2013

1. Student Details (in BLOCK LETTERS)

Name	Roll Number
Signature 1. AYISHA BEEBA	 13

Date: 01/12/2021

Approval Status : Approved / Not Approved _____

Signature of
Committee Members

Comments of The Mini Project Guide

Dated Signature

Initial Submission :

First Review :

Second Review :

Comments of The Project Coordinator

Dated Signature

Initial Submission:

First Review

Second Review

Final Comments :

Dated Signature of HOD

Rumor Detection from Social Media

Ayisha Beeba

Introduction:

The objective is to detect and ascertain the rumor on social media. The extensive spread of rumor has the potential for extremely negative impacts on individuals and society. Social psychology literature defines a rumor as a story or a statement whose truth value is unverified or deliberately false. False rumors are damaging as they cause public panic and social unrest thereby creating a chaos in the city. Automatically predicting the veracity of information on social media is of high practical value. Debunking rumors at an early stage of diffusion is particularly crucial to minimizing their harmful effects. To distinguish rumors from factual events, individuals and organizations often have relied on common sense and investigative journalism. Rumor reporting websites like snopes.com and factcheck.org are such collaborative efforts. However, because manual verification steps are involved in such efforts, these websites are not comprehensive in their topical coverage and also can have long debunking delay.

Objectives:

The rumor detection on social media has recently become an emerging research that is attracting tremendous attention. Social media for news consumption is a double-edged sword. Automatic rumor detection from social media is based on traditional classifiers that detect misinformation stemming from the pioneering study of information credibility on Twitter. Existing rumor detection models use learning algorithms that incorporate a wide variety of features manually crafted from the content, user characteristics, and diffusion patterns of the posts. Most of these prior works attempted to classify the veracity of spreading memes using information other than the text content, for instance, the popularity of a post (e.g., the number of retweets or replies of the post), the features relevant to determine a user's credibility, etc. However, feature engineering is painstakingly labor intensive. The RNN-based method disregards this completely yet can achieve better performance due to the effective representation learning capacity of deep neural models.

Problem Definition:

Collection of data from post datasets using Twitter ([www. twitter.com](http://www.twitter.com))

For the Twitter data, we confirmed rumors and non-rumors from [www. snopes.com](http://www.snopes.com), an online rumor debunking service.

For each event, we extract the keywords from the last part of the Snopes URL. Apply a type of feed-forward neural network RNN that can be used to model variable-length sequential information such as sentences or time series. The RNN-based model will classify posts or microblog events into rumors and non-rumors.

Basic functionalities: Tried to detect rumors on media.

Tools / Platform, Hardware and Software Requirements:

Python based Computer Vision and Deep Learning libraries will be exploited for the development and experimentation of the project. Tools such as Anaconda Navigator, Python, and libraries such as [Tensorflow](#), and [Keras](#) will be utilized for this process.